Medical Practice Achieves U.S.$400,000 Return on Investment, Increases Care Quality

Overview

Country: United States
Industry: Healthcare

Customer Profile
Oswego County (New York) OB-GYN has nine medical professionals and sees 200 patients a day at its five locations. This year, the practice will deliver some 675 babies.

Business Situation
The practice's 70,000 medical records were increasingly difficult to handle and distribute to appropriate offices in time for patient visits. Nor did the solution meet HIPAA requirements.

Solution
The PrimeSuite integrated practice management and electronic medical records solution from Greenway Medical Technologies Inc. is based on the Microsoft® Windows Server System™ and Web services.

Benefits
- Patient care enhanced
- U.S.$407,000 first-year return on investment
- Paperwork cut by one hour per doctor per day
- Practice sees 25 more patients per week
- Gross collections up by four percent

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>
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The Oswego County (New York) OB-GYN medical practice needed a better way to manage patient records, increase insurance reimbursements, and meet requirements of the Health Insurance Portability and Accountability Act (HIPAA). Its solution: the PrimeSuite integrated practice management and electronic medical records solution from Greenway Medical Technologies Inc., based on Microsoft® Windows Server System™ integrated server software and Microsoft .NET-connected Web services. The solution helped the practice achieve the estimated U.S.$407,000 return on investment in its first year through increased savings and revenues. With paperwork reduced by up to an hour per day per physician, doctors are seeing 25 more patients per week without increasing their hours. Gross collections are up four percent. And the quality of care is enhanced, making the solution a "win-win" for patients and the practice.

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Situation

Oswego County OB-GYN—the only obstetrics and gynecology practice in Oswego County, New York—has served its community for more than 40 years. The practice continues to grow. Today, it includes five physicians who are board-certified specialists; two certified nurse midwives, two certified nurse practitioners, registered and licensed practical nurses, medical assistants and support staff. The practice operates from five locations and sees about 200 patients every day. This year, the practice will deliver some 675 babies.

Managing the practice through that growth has been a challenge. Oswego County OB-GYN's practice management system was a character-based system running on terminals connected to a PC server. Connectivity among the various offices was limited to a 9600 baud dial-up modem. As the practice continued to grow, this solution was increasingly inadequate. For example, it lacked an electronic medical records (EMR) component, forcing the practice to store more than 70,000 paper-based records on-site.

Getting those records where they needed to be in time for patient visits was often difficult; a "sneaker net" (meaning, hand-delivering by walking) had medical assistants carrying 30–50 medical records per day among the various offices. And sometimes, getting records where they needed to be was just impossible—as, for example, when patients scheduled last-minute appointments. The result: doctors had to see patients without having their full medical files available.

Yet another set of issues concerned the billing of patients' insurance companies for payment. Doctors did not always check off all of the appropriate billing codes on patient records, preventing the practice from receiving all of the reimbursement to which it was entitled. And when there were discrepancies or insurance-company questions about reimbursement, the result was at least delayed payment and, in many cases, payment for less than the practice had anticipated.

Oswego County OB-GYN's interest in upgrading its practice management solution and expanding it to include an EMR component came to a head around the year 2000. Beginning in 2003, healthcare providers would have to meet provisions of the Health Insurance Portability and Accountability Act (HIPAA) of 1996. Those provisions included a complete revamping in the way most providers—including Oswego County OB-GYN—managed patient records and billing, in order to enhance patient privacy. The practice needed a new solution in place both to meet its own, expanding needs, as well as the upcoming requirements of the new federal law.

Solution

Oswego County OB-GYN researched its new solution carefully, over an 18-month period. In July 2002, it selected the PrimeSuite integrated practice management and EMR solution from Greenway Medical Technologies, Inc., a Microsoft Certified Partner based in Carrollton, Georgia.

The Right Company: Greenway Medical Technologies

Oswego County OB-GYN chose PrimeSuite in part because it liked Greenway Medical Technologies. "We liked Greenway's company philosophy," says Daniel Mather, Practice Manager, Oswego County OB-GYN. "They offered a turnkey solution that would address all of our needs, including hardware, software, and network infrastructure. They believed in working with us closely in a team concept to implement a solution customized for our requirements. And the number of physicians and medical personnel on their staff demonstrated their seriousness in providing a solution for healthcare providers like us."

The Right Technology: Microsoft Windows Server System

PrimeSuite templates make it faster and easier for doctors to complete documentation on patient visits.

The PrimeSuite solution is based on key Microsoft® technologies, including Microsoft Windows Server System™ integrated server infrastructure software. In particular, the solution relies on Microsoft BizTalk® Server 2004 and the BizTalk Accelerator for HL7 (a healthcare industry data standard), which enable PrimeSuite to communicate with insurance companies, hospitals, labs, and other external sources.

It also relies on Microsoft SQL Server™ 2000, which provides the solution's database and, through SQL Server stored procedures and triggers, much of its business logic. Finally, the solution is also based on 12 Microsoft .NET-connected Web services, which enable integration among key solution components. "We were impressed that the Greenway solution took advantage of the latest Microsoft technologies," says Mather. "Greenway's use of the .NET Framework meant that our solution would be sufficiently flexible and extensible to grow with us for years to come."

Deploying the Solution

After signing with Greenway in July 2002, Oswego County OB-GYN's Mather met with Greenway in September to customize the solution. Greenway provided training—both at its facility and at Oswego County OB-GYN—in several sessions in September and December. The practice management component went live in December. Greenway trained the practice in the EMR portion of the solution in February and March 2003, and the EMR portion went live for the practice's gynecology services in March. Greenway converted the practice's obstetrics records starting in July, and the obstetrics portion of the practice was completely live with the solution in October.

"The key challenge for us was adopting the solution without missing a single patient visit throughout the process," says Mather. "We met that challenge by adopting the solution in a series of measured stages, and by ensuring that our physicians had sufficient training to see its benefits and ensure its actual use."

Using PrimeSuite

Doctors, nurses, and other authorized users access PrimeSuite data through their Web browser, Microsoft Internet Explorer 6.0, which accesses ASP.NET Web pages that interact with the SQL stored procedures and .NET Enterprise Services to deliver and accept patient information. Because the solution is Web-based, doctors can access patient records securely even when they're away from the office.

During or after patient visits, doctors use wirelessly networked, pen-based tablet computers running the Microsoft Windows® XP Professional, Tablet Edition, operating system—or laptop or desktop computers running Windows XP Professional (as they prefer)—to enter patient information into specialty-specific templates, custom-created for their use by Greenway. The templates give doctors the ability to customize their notes and

remind them of appropriate procedures and billing codes for each type of visit.

The electronic medical records that doctors create are managed by the solution as Extensible Markup Language (XML) style sheets and passed to and from key solution components via .NET-connected Web services. "Web services are a great way to handle this information, because the solution only sends and receives 'deltas' or updates, making data faster to move around and faster to display on the caregiver's screen," says Greg Schulenburg, Vice President, Software Development, Greenway Medical Technologies.

Lab reports from external labs associated with the practice also come through the solution, via Equisys's Zetafax®,routed electronically. Oswego County OB-GYN nurses do a first-pass review of results, label the results as normal or abnormal, and forward them in categorized queues that appear on the doctors' electronic desktops for their review and action, often within hours of when the patient tests were administered.

Looking ahead, Mather anticipates receiving lab results as XML data passed via BizTalk Server and Web services—as insurance information is now exchanged—when the local labs adopt this capability.

Data is stored in the SQL Server database both as XML, for easy retrieval and use, and as Adobe Acrobat Portable Document Format (or PDF) files to meet HIPAA requirements for uneditable data that will always reflect records at the moment they were stored in the system.

Benefits

Oswego County OB-GYN achieved a first-year return on investment of U.S.$407,000 with the Greenway solution. Virtually every aspect of its operations has become more productive—and the practice finds that the solution boosts the quality of medical care it can provide, as well.

Doctors Increase Patient Time, Decrease Paperwork

"As a result of the Greenway solution and Microsoft technology, our doctors spend more time doing what they got into medicine for—seeing patients—and less time on paperwork," says Mather.

Doctors now review patient lab results in as few as three hours from the time they saw the patient, down from 36 hours previously. And Time spent reviewing those results—which formerly required half an hour per day—has been cut significantly, as well. Doctors have also reduced much of the time they spent on patient charting. On these two functions, each doctor saves up to 60 minutes per day, which enables the practice to see an additional 24 patients per week without increasing the time that doctors spend in the office. In addition to providing faster care and patient service, the increased productivity enables the practice to increase revenues by more than $56,000 annually.

Gross Collections Increase by $193,764

Nearly half of the $407,000 return on investment from the solution—$193,764—comes from an increase in the gross collection rate from 52.2 percent to 56.4 percent. The increase is attributable to a variety of enhancements, according to Mather. First, billings go out much faster than they did before, and tracking mechanisms are "ten times better" than Oswego County OB-GYN had previously, making it faster and easier for administrative staff to identify aging receivables and call the insurance companies to resolve them.

"The speed of the system in generating reports is phenomenal," says Mather. "Previously, we had to run an aging report overnight, because it took up to eight hours. Now, our longest report takes just five minutes."

In addition, because physicians are coding office visits more appropriately—for example, coding preventative visits as such, rather than coding them as established patient visits, which have a lower reimbursement rate—the practice is realizing another $58,000 from the same office visits.

Patient Care Enhanced

Although it can't be quantified as readily as the productivity savings, Mather says the practice is also confident that the solution has increased the quality of care at Oswego County OB-GYN. With patient records available to authorized users within seconds, nurses and doctors can respond more helpfully to patients not only during office visits, but even during phone calls. With doctors spending less time on paperwork, patients can be seen more quickly. And lab results received and reviewed more quickly enable doctors to put their patients at ease more quickly when results show no problem, or to put their patients into treatment more quickly when they do reveal a problem.

"The Greenway solution and Microsoft technology enable us to deliver better patient care even as we save money and increase productivity," says Mather. "It's a win-win for our patients and for us."

Doctors can enter data into patient charts electronically, during the patient visit, using pen-based Tablet PCs.

For More Information

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For more information about Greenway Medical Technologies Inc. products and services, call (770) 836 - 3100 or visit the Web site at: www.greenwaymedical.com

For more information about Oswego County OB-GYN products and services, call (315) 343-2590 or visit the Web site at: www.ocobgyn.net

Microsoft Windows Server System

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